

Claims

1. A method of coupling user equipment information specific to a multicast/broadcast service with a multicast/broadcast service context of a controlling device, wherein a multicast/broadcast service is provided within a communication network comprising a core network and a radio access network, the core network comprising at least one serving device, and the radio access network comprising a plurality of user equipment, at least one serving device, and controlling devices, the method comprising:

- establishing a multicast/broadcast service context of a controlling device by a serving device of the core network;

- establishing a user equipment specific multicast/broadcast service context by the serving device of the core network, wherein this establishing procedure is capable of being effected upon a different time as the controlling device multicast/broadcast service context establishing procedure;

- determining a respective location of user equipment which desire to join the broadcast service by a serving device of the radio access network by checking a respective list received from the serving device of the core network;

- sending a user equipment active list by the serving device of the radio access network informing the controlling device about the number of joined user equipment and the multicast/broadcast service in question, wherein the active list includes, if applicable, also respectively joined user equipment within a cell controlled by another controlling device;

- selecting a channel type by the controlling device for the connection of the multicast/broadcast service to the respectively joined user equipment;

- informing the serving device of the radio access network about the selection;

- activating the multicast/broadcast service context in the serving device of the radio access network as an accepted service for the user equipment after receipt of successful coupling information from the controlling device; and

- informing the respectively joined user equipment by the serving device of the radio access network about the multicast/broadcast service.

2. The method according to claim 1, wherein when the multicast/broadcast service context is activated in the serving device of the radio access network, the activated multicast/broadcast context is taken into account when radio resource controlling states for the user equipment are updated.

3. The method according to claim 1, wherein the multicast/broadcast service context of the controlling device is rejected, and the selecting step and the selection informing step are not performed, and the multicast/broadcast informing step includes an indication about the unsuccessful coupling of the respectively joined user equipment to the multicast/broadcast service.

4. The method according to claim 3, wherein rejection is informed to the serving device, so that the serving device is allowed to decide whether the multicast/broadcast service informed in the multicast/broadcast service context of the controlling device is served to the user equipment by using user equipment specific dedicated channels.

5. The method according to claim 4, wherein if the decision about using user equipment specific dedicated channels for multicast/broadcast service informed in the service context is rejected or the decision to use the user equipment specific dedicated channels is negative, the multicast/broadcast service context is not activated and the serving device of the radio access network does not take this activated multicast/broadcast context into account when Radio Resource Controlling states for the user equipment are defined.

6. The method according to claim 5, wherein if the use of the user equipment specific dedicated channels for the multicast/broadcast service is rejected, a removal of the multicast/broadcast service context from the serving device is started by informing an unsuccessful context support to the serving device of the core network.

7. A serving device of a core network, comprising:
means for establishing a multicast/broadcast service context of a controlling device of a radio access network;
means for establishing a user equipment specific multicast/broadcast service context at a different time;
means for sending a list of respective locations of user equipment which desire to join the multicast/broadcast service; and
means for the handling of an unsuccessful context information from the serving device.

8. A serving device of a radio access network, comprising:
means for determining a respective location of user equipment which desire to join a multicast/broadcast service by checking a respective list received from a serving device of a core network;
means for sending a user equipment active list informing a controlling device of the radio access network about the respective number of user equipment which join respective multicast/broadcast services in question, wherein the active list includes, if applicable, also respectively joined user equipment within a cell controlled by another controlling device of the radio access network;
means for activating the multicast /broadcast service in the serving device as an accepted service by the controlling device after receipt of information about the successful coupling;
means for informing the respectively joined user equipment about the multicast/broadcast service;
means for deciding whether the multicast/broadcast service can be served to user equipment by using the user equipment dedicated specific channels after an unsuccessful coupling in the controlling device; and
means for using received information about successful coupling when the Radio Resource Controlling (RRC) state for the user device is updating.

9. A controlling device of a radio access network, comprising:
means for selecting a channel type for the connection of a
multicast/broadcast service to respectively joined user equipment;
means for informing a serving device of the radio access network about
the selection; and
means for informing the serving device of the radio access network about
an unsuccessful coupling of the respectively joined user equipment to the
multicast/broadcast service.

10. A system for coupling user equipment information specific to a
multicast/broadcast service with a multicast/broadcast service context of a
controlling device, the system providing a multicast/broadcast service and
comprising a core network and a radio access network, the system comprising:
at least one serving device of the core network according to claim 3;
at least one serving device of the radio access network according to
claim 4;
controlling devices of the radio access network according to claim 5; and
a plurality of user equipment.